



6-104.12 1147

**Department of Energy**

**Ohio Field Office  
Fernald Area Office**

P. O. Box 538705  
Cincinnati, Ohio 45253-8705  
(513) 648-3155



DEC 15 1997

DOE-0244-98

Mr. James A. Saric, Remedial Project Manager  
U.S. Environmental Protection Agency  
Region V-SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5th Street  
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT DURING NOVEMBER 1, 1997, THROUGH  
NOVEMBER 30, 1997**

This letter transmits the amended Consent Agreement Monthly Report during November 1, 1997, through November 30, 1997. This report is formatted to reflect the proposal presented in the Letter, DOE-0395-96, J. Reising to J. A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements," dated January 16, 1996, and agreed to by the U.S. Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (OEPA).

Sincerely,

Johnny W. Reising  
Fernald Remedial Action  
Project Manager

Enclosure: As Stated

cc w/enc:

N. Hallein, EM-42, CLOV  
G. Jablonowski, USEPA-V, 5HRE-8J  
R. Beaumier, TPSS/DEER, OEPA-Columbus  
F. Barker, Tetra Tech  
D. Carr, FDF/52-2  
T. Hagen, FDF/65-2  
AR Coordinator, FDF/78

cc w/o enc:

F. Bell, ATSDR  
D. S. Ward, HSI GeoTrans  
J. Harmon, FDF/90  
R. Heck, FDF/2  
S. Hinnefeld, FDF/2  
B. Irvine, FDF/65-2  
T. Walsh, FDF/65-2  
EDC, FDF/52-7

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1997**

**Introduction**

This report describes actions at the Fernald Environmental Management Project (FEMP) from November 1 through 30, 1997. The monthly report has been revised to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J.A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements", dated January 16, 1996, and agreed to by USEPA and OEPA.

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1997**

**OPERABLE UNIT 1 - WASTE PITS REMEDIAL ACTION PROJECT**

November 1997

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Completed
  - Completed Paddy's Run trestle upgrade
  - Continued on-site rail infrastructure upgrade
  - Mobilized locomotive maintenance building erection subcontractor; began construction
  - Began implementing Alternative Remedial Action Subcontracting Approach (ARASA) subcontract pre-mobilization deliverables
  - Completed draft version of Transportation and Disposal Plan, a Remedial Action Work Plan (RAWP) deliverable
  - Continued development of Waste Management Plan

December 1997 (Anticipated)

- Enforceable Milestones
  - Transmit Submittal Register for ARASA subcontractor Remedial Design/Remedial Action (RD/RA) deliverables to Agencies
- Major Work to be Initiated/Completed
  - Complete on-site rail infrastructure construction
  - Complete erection and installation of locomotive maintenance building
  - Continue implementation of ARASA subcontract pre-mobilization deliverables; issue Notice to Proceed to ARASA subcontractor
  - Submit Transportation and Disposal Plan to DOE-FEMP
  - Continue development of Waste Management Plan
  - Award contract for Shandon Yard upgrade
  - Award contract for locomotive maintenance building utilities installation
  - Award contract for rail and access road lighting

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1997**

**OPERABLE UNIT 2 - ON-SITE DISPOSAL FACILITY**

**Additional OU2 soils-related activities reported under OU5/Soils Characterization  
and Excavation Project.**

November 1997

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Completed
  - On-Site Disposal Facility (OSDF)
    - Completed installation of Cell 1 secondary composite liner and leak detection system
    - Initiated installation of Cell 1 primary composite liner
  - Leachate Conveyance System (LCS)
    - Installed electrical instruments for Manholes 1, 2, 3, and Permanent Lift Station
    - Worked on construction punchlist items
    - Began preparation for Integrated Construction Acceptance Testing (ICAT) and Systems Operability Testing
  - Haul Road/Relocated North Entrance Road
    - Completed asphalt paving, shoulder work, and painting to finish Haul Road

December 1997 (Anticipated)

- Enforceable Milestones
  - Place seasonal cover on OSDF by December 31, 1997, as required by OSDF RAWP
- Major Work to be Initiated/Completed
  - OSDF
    - Complete installation of primary composite liner, leachate collection system, protective layer, and seasonal cover
    - Close OSDF for winter season
  - LCS
    - Complete construction punchlist items
    - Perform ICAT, Systems Operability Testing, and Standard Startup Review
    - Initiate leachate collection and treatment upon placement of impacted material
  - Roads
    - Close-out project (field work completed)

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1997**

**OPERABLE UNIT 3 - FACILITIES CLOSURE & DEMOLITION PROJECTS**

November 1997

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Completed
  - **Safe Shutdown**
    - Completed holdup material removal in selected areas of Plant 8
    - Completed energy isolation procedures in Buildings 78
    - Excavated domestic water line for Building 78
  - **D&D**
    - Boiler Plant/Water Plant
      - Continued asbestos abatement/removal activities
      - Completed demolition of Fly Ash Silo, Electrostatic Precipitators, and Clearwell Building; initiated demolition of railroad tracks
      - Sized, segregated, and containerized debris from demolition activities
    - Thorium/Plant 9 Complex
      - Continued mobilization activities (installation of fencing, establishment of queuing areas, etc.)
      - Proceeded with preparation/submittal of Safe Work Plans
      - Initiated demolition of railroad tracks

December 1997 (Anticipated)

- Enforceable Milestones
  - None
- Major Work to be Initiated/Completed
  - **Safe Shutdown**
    - Continue holdup material removal in areas of Plant 8 and Building 2A
    - Continue energy isolation procedures in Plant 8
    - Complete underground utility disconnects in Plant 8
    - Complete equipment removal in Building 78
  - **D&D**
    - Boiler Plant/Water Plant
      - Continue asbestos abatement/removal activities
      - Continue demolition of pipe bridge and Wet Salt Storage Bin
      - Begin transite removal at Boiler Plant
      - Continue ongoing sizing, segregation, and containerization of debris

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1997**

- Thorium/Plant 9 Complex ---
  - Continue preparation of subcontractor work plans
  - Complete mobilization activities for Building 32 and Plant 9
  - Begin D&D of Magnesium Storage Warehouse (Building 32) and perform D&D preparation activities in Plant 9

**OPERABLE UNIT 4 - SILOS PROJECTS**

November 1997

- Enforceable Milestones Completed
  - Submitted following deliverables to Agencies November 20 1997, as agreed in the OU4 Dispute Settlement Agreement:
    - Work Plan for Establishment of a Conservation Area Near the FEMP
    - Work Plan for Research Grants for Ecological Restoration

**NOTE: The two Work Plans listed above are Supplemental Environmental Projects required under the OU4 Dispute Resolution dated July 22, 1997; they are to be managed and implemented under the auspices of OU5, through the Soils Characterization and Excavation Project.**

- Major Work Initiated/Completed
  - Began preparation of Preliminary Screening of Technologies for treatment of Silos 1 and 2 material
  - Initiated preparation of Request for Proposal (RFP) for Silos 1 and 2 Multi-Tech Proof-of-Principle Testing
  - Received responses to Commerce Business Daily (CBD) announcement for Silos 1 and 2 Multi-Tech Proof-of-Principle Testing; identified 20 potential vendor teams as qualified to receive RFP
  - Issued Silo 3 Waste Project Draft RFP for review and comment by Agencies, stakeholders, and potential subcontractors
  - Received USEPA approval of Draft Silo 3 Explanation of Significant Differences (ESD); issued Draft Final ESD for public comment November 17, 1997, and conducted public hearing on ESD at November 25, 1997, Fernald Cleanup Progress Briefing
  - Briefed stakeholders on radon emissions and the concept for the Accelerated Waste Retrieval/Transfer Tank Area/Radon Control System Project on November 20, 1997, at meeting of Fernald Residents for Environment, Safety and Health (FRESH)
  - Continued dismantlement/removal of piping and equipment at Vitrification Pilot Plant

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1997**

December 1997 (Anticipated)

- Enforceable Milestones
  - None
- Major Work to be Initiated/Completed
  - Brief stakeholders on Silos 1 and 2 Proof of principle testing RFP and Preliminary Screening of Technologies at December 9, 1997, Fernald Cleanup Progress Briefing
  - Discuss stakeholder comments on Draft Silo 3 RFP at December 1, 1997, meeting of Fernald Citizens Advisory Board Waste Management Committee
  - Begin incorporation of stakeholder comments on Draft Silo 3 RFP
  - Hold public hearing on Draft Final Silo 3 ESD at Nevada Test Site Citizens Advisory Board meeting December 2, 1997; close public comment period and initiate preparation of Responsiveness Summary and Final ESD
  - Conduct mock-up testing of Silo 3 Small Scale Waste Retrieval System at Silo 4; initiate installation of equipment at Silo 3
  - Receive final report outlining results of testing on Silo 4 core samples
  - Prepare Draft National Environmental Policy Act (NEPA) Supplemental Analysis for Accelerated Waste Retrieval Project

**OPERABLE UNIT 5 - SOILS AND WATER PROJECT**

November 1997

- Enforceable Milestones Completed
  - **Aquifer Restoration/Wastewater Project (ARWWP)**
    - Submitted Final Operations and Maintenance Master Plan to Agencies November 7, 1997
    - Submitted monthly National Pollutant Discharge Elimination System (NPDES) Discharge Monitoring Report to OEPA November 13, 1997, for October 1997 report month
  - **Soils Characterization and Excavation Project (SCEP)**
    - Submitted Prefinal Area 1 Phase II (*Southern Half of East Field*) Integrated Remedial Design Package (IRDP) to Agencies November 20, 1997; required crosswalk of hazardous waste management unit (HWMU) closure components for Sludge Drying Beds (HWMU #41) in Area 1 Phase II submitted to OEPA November 26, 1997, within seven-day time frame mandated by the RCRA/CERCLA Integrated Closure Director's Final Findings and Orders dated June 1996



**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1997**

- Submitted Draft Work Plans for Establishment of a Conservation Area Near the FEMP and for Research Grants for Ecological Restoration (see November Enforceable Milestones for Operable Unit 4 - Silos Projects)
- Major Work Initiated/Completed
  - **ARWWP**
    - Continued construction activities associated with Advanced Waste Water Treatment (AWWT) Ion Exchange Regeneration System, and also with AWWT Expansion
    - Completed drilling of monitoring wells for Injection Demonstration System
    - Completed drilling extraction well RW-6 and began drilling RW-7 for South Plume Optimization Project
    - Relocated Bionitrification/Effluent Treatment System to new Sewage Treatment Plant (STP); completed design of new STP piping and issued contractor bidding package
  - **SCEP**
    - Met with OEPA November 5, 1997, to discuss real-time instrument application, WAC attainment issues, and Area 2 Phase I (*Southern Waste Units*) IRDP submittal delay
    - Continued weekly inspections of embankment erosion area along Paddy's Run channel; completed evaluation of alternatives for stabilization of embankment, and presented conceptual design of recommended alternative to Agencies
    - Continued Area 2 Phase I Site Prep package field implementation activities, including grading and graveling of support area, installation of geotextile material under stockpile areas, and clearing/grubbing for retention basins
    - Submitted response to comments on Area 2 Phase I Site Prep package to Agencies November 14, 1997
    - Received OEPA comments on Draft Sitewide Excavation Plan (SEP)
    - Continued development of Project Specific Plans (PSPs) and IRDP for Area 3 (*Northern Portion of the Former Production Area*)

December 1997 (Anticipated)

- Enforceable Milestones
  - **ARWWP**
    - Submit monthly NPDES Discharge Monitoring Report to OEPA
  - **SCEP**
    - Submit Draft Work Plan for Habitat Area Project to Agencies by December 31, 1997 (see December Enforceable Milestones for Operable Unit 4 - Silos Projects)

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1997**

- Major Work to be Initiated/Completed
  - **ARWWP**
    - Submit response to comments on Design, Monitoring, and Evaluation Program Plan to Agencies
    - Submit response to OEPA comments on Draft Final Baseline Remedial Strategy Report
    - Continue extraction well drilling for South Plume Optimization Project
    - Complete construction of AWWT Ion Exchange Regeneration Project
    - Continue construction activities associated with AWWT Expansion
  - **SCEP**
    - Perform additional sampling activities in Area 1 Phase I (*Northern Half of East Field & Areas North of Production Area*), Eastern and Western Portions, in support of Waste Acceptance Criteria attainment
    - Initiate Final Remediation Levels (FRL) attainment precertification field activities for Area 8 Phase I (*On-Property OU5 Soil in Area West of Paddy's Run*)
    - Continue development of Project Specific Plans (PSPs) and IRDP for Area 3
    - Submit response to comments to Agencies on Area 1 Phase I Certification Report
    - Submit the following documents:
      - Paddy's Run Embankment Stabilization Project Work Plan for Phase II activities
      - Revised Area 2 Phase I Site Preparation package construction drawings and technical specifications
      - Addendum to OU5 Remedial Design Work Plan to outline strategy for off-property FRL attainment certification
      - Draft Work Plan for Aesthetic Barrier Project
    - Await USEPA response to request for schedule extension delaying submittal of Area 3 IRDP from current milestone date of July 2, 1998 to March 31, 2000
    - Await OEPA comments on several SCEP submittals presently in review:
      - Waste Acceptance Criteria Attainment Completion Reports, Area 1 Phase I, Eastern Portion and Western Portion, both submitted June 1997
      - RTRAK (Radiation Tracking System) Applicability Study Report, submitted July 1997
      - Comparability of In-Situ Gamma Spectroscopy (HPGe) and Laboratory Data Report, submitted July 1997

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIATION INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1997**

**WASTE MANAGEMENT**

**November 1997**

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Completed
  - Low Level Waste
    - No shipments of low level waste to Nevada Test Site (NTS) were made during November 1997, as a result of pre-existing suspension of Waste Stream #6 - Residues; suspension lifted November 19, 1997
  - Mixed Waste Treatment Projects
    - Liquid Mixed Waste --- Continued analysis of waste characterization sampling results from Batch #7 (19,000 + gallons of mixed waste), and bulking of Batch #9 (newly generated waste streams); completed sampling of Batch #8 (newly generated low level waste)
  - Chemical Treatment Projects
    - Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project --- Treated 17 drums of waste during month; total of 623 drums treated in project as of November 25, 1997
    - Organic Extraction Project (RCI/Terra-Kleen) --- Completed demonstration phase and received analytical results for evaluation
  - Hazardous Waste/Recycling Project --- Completed training of shipping subcontractor's personnel
  - Thorium Legacy Waste Stabilization Project --- Continued characterization of thorium legacy inventory; Final Technology Work Plan submitted to DOE-FEMP November 24, 1997

**December 1997 (Anticipated)**

- Enforceable Milestones
  - None
- Major Work to be Initiated/Completed
  - Low Level Waste
    - Resume shipments to NTS
  - Mixed Waste Treatment Projects
    - Liquid Mixed Waste Project --- Ship Batch #7 to TSCA Incinerator; continue evaluation of waste streams for potential bulking into Batch #9

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1 THROUGH  
NOVEMBER 30, 1997**

- Chemical Treatment Projects
  - NPDS Project --- Evaluate additional waste for inclusion in project
  - Organic Extraction Project (RCI/Terra-Kleen) --- Continue evaluation of analytical results and subcontractor's recommendations
- Hazardous Waste/Recycling Project --- Resume packaging for Lab Pack shipments from Analytical Lab Services; shipment scheduled December 9, 1997 to the Heritage facility in Indianapolis, Indiana
- Thorium Legacy Waste Stabilization Project --- Submit Technology Specific Work Plan to OEPA